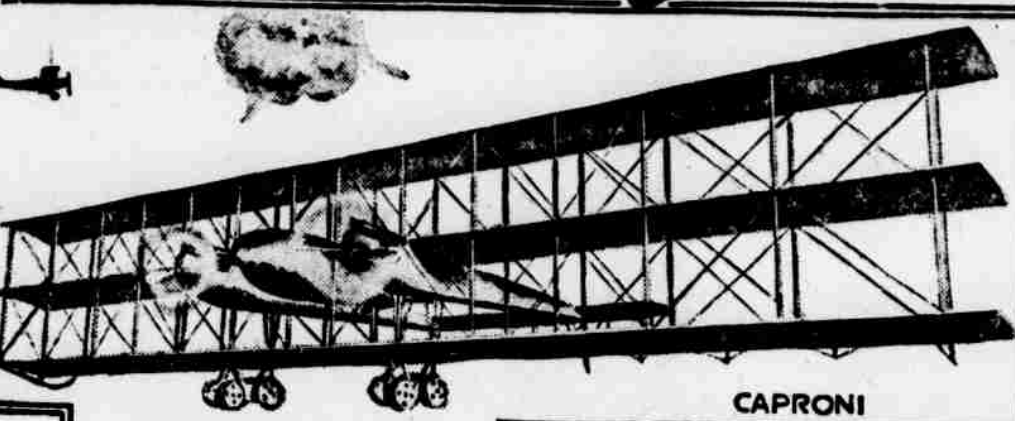


NEW AIRPLANES DEVELOPED BY WAR



POMILIO



CAPRONI



ALBATROSS



GOTHA



S.V.A.

the propeller, and 100 cartridges for each gun. Returning now to the bombing machines, the types best known are the German Gotha, which is virtually a copy of the British Handley-Palmer, and the Italian Caproni. The dimensions of the latter cannot be given, for the machines are in several sizes, the smaller being biplanes, the largest being a triplane. Those of the Gotha G III are known. It is a biplane with a wing spread of 77.7 feet, and fuselage 40.38 feet long; it can go 96.8 miles an hour, ascend 14,850 feet and carry a load of 1,320 pounds of bombs besides at least two men.

It was necessary to put three planes on the larger Caproni, in order to carry the immense weight at high speed. It has three fuselages, each with its own motor, the one in the middle being much shorter than the others. The right and left fuselages have propellers in front, the middle fuselage has a propeller behind. The motors are 240-horse-power Isotta-Fraschini.

The Caproni are slow machines—only about 90 miles an hour—and are capable of fighting single-handed against the little wasps of the air. They are unique in that any one of their motors suffices to propel the machine; therefore, all three must be stopped by bullets before it is disabled. In this last respect its only rival is—so far as known at present writing—the great German Gotha, which has two motors, either of which will propel it.

One of the most striking facts about the evolution of air craft since the war began is that the monoplane has virtually disappeared. Quite early in the war the French Nieuport grew an extra pair of wings. The principal reason why two pairs are better than one is that lifting power in the air depends upon the area of the wings. Now the Gotha's two pairs of wings are 77.7 feet long and 7.326 feet wide, which gives an area of 569 square feet for each pair, or 1,138 square feet as the total wing surface. If this were all in a single plane, the wing would have to be about 153 feet long if they had the same breadth as now; and the leverage of the wind on their ends would be so great that the machine would be absolutely unmanageable.

For this same reason the biggest of the Caproni, which is by far the largest thing in the air, has three planes instead of two.

The Gotha is, however, more than a bombing machine; it is a veritable aerial battleship. Over its bow on a swivel is a machine gun that can shoot forward over a horizontal arc of more than 180 degrees, and over a perpendicular arc of about 240 degrees. On its fuselage, behind its wings and behind the propellers, is another gun that shoots astern over a horizontal arc of nearly 180 degrees and over a perpendicular arc of about 190. Besides these two guns the Gotha has a third, mounted on a pivot in the body of the fuselage and pointing downwards, through a port hole

in the bottom of the fuselage. By means of this last gun it can defend itself from enemy machines attacking it from below and behind, a position in which all other machines but the Gotha are vulnerable.

The Germans have been most ingenious in designing their airplanes for maximum effectiveness of gun fire. Their single-seated Albatross D. I and D. III, Fokker D. Halberstadt Roland D. and Ago D. have two fixed guns firing ahead through the revolving propeller, and these machines are able to carry 2,000 cartridges for each gun. Their two-place reconnaissance machines Albatross, Rumpler, Aviatik and L. V. G. have one fixed forward gun firing through the propeller and a second lighter gun on a swivel mounted behind the planes and firing to the rear over an angle of 180 degrees. The French have adopted this system for the airplanes of similar type.

The most ingenious armament, however, is that of the new Pomilio scout plane. It is not advisable to betray the secret of this plane at present, but it is permissible to say that the single pilot controls five guns, all shooting ahead simultaneously, and that four of these are so perfectly concealed that even a photograph does not show where they are situated. It is in reality a five-barreled Gatling gun on wings. This machine is now on its way to America, if indeed it has not already arrived.

Talking with the Italian aviators now here about motors, I found them deeply interested in the new Liberty motor, but none would venture to express an opinion about it.

"I could not judge of its value," said one of them, "until I had taken it up 5,000 or 100,000 feet in the air and watched how it behaved there. The Fiat company, which has been making motors ever since these were first invented, needed two whole years of experimentation before it was able to turn out a satisfactory airplane motor. Several times it thought it had it; several times it offered a motor that performed perfectly under the most exacting laboratory tests, but each time it failed when tested in the rarefied air of 10,000 feet above the earth. After two years of trial the Fiat people produced the wonderful motors now so extensively used. The Isotta-Fraschini company had a similar experience. We all admire the perfection of mechanism of the Liberty motor and we all hope that actual flight will prove it to be as perfect as it looks, but no one of us would venture to give a verdict on it until he had flown with it at all possible altitudes."

These men, all of whom are youths who have had thrilling experiences in actual warfare, are fond of discussing the probabilities of a flight across the Atlantic. Any one of them would be willing to attempt it, but they disagree as to the machine most likely to be the first to make it. Some say the giant Caproni, which would need at least 24 hours, and probably 40, to fly from Newfoundland to Ireland (the shortest route), while others say some such machine as the S. V. A., as it could make the flight easily between sunrise and sunset. In the one case it would be like a giant condor relying on the power of its wings to sustain it a day and a night in flight, in the other case it would be a sea gull or a swallow relying on terrific speed to carry it over by daylight.

NAMING OF WARSHIPS.

The law requires that all first-class battleships "shall be named for states and shall not be named for any city, place, or person until the names of the states have been exhausted," and a recent article by Walter Scott Meriwether in the *Rudder* points out that Secretary Daniels' recent order assigning the names of New Mexico, California, Tennessee, Mississippi, and Idaho to the five superdreadnaughts now under construction completely exhausts the list of unused names. In selecting names for the five battle cruisers authorized by the last congress, recourse was had to names which never should have disappeared from the navy register—Constitution, Constellation, Saratoga, Ranger, and Lexington. The famous old frigates Constitution and Constellation, now preserved as relics of the wooden fleets of a century ago, will be known as "Old Constitution" and "Old Constellation." The present Saratoga was formerly the New York, the armored cruiser which served as Admiral Sampson's flag ship.

EVERY MAN TO HIS LAST.

Because you are an excellent carpenter, declared Socrates in his famous Apology at Athens, it does not therefore follow that you are the wisest of men. Yet the tendency persisted and persisted, and Alexander Cruden, a great maker of concordances, was found offering his services to the British government, over 150 years ago, as "corrector of morals," just as many rich business men in England today are offering their services to the government "under the conviction that they can do in one day what an expert can barely manage in three."—*Christian Science Monitor*.

IN MONTENEGRO.

There's a peculiar superstition in Montenegro where the peasants believe that the iron kettle chain over the hot fireplace will not heat at all on Christmas night, as at all other times, but remains cool to the touch. To explain this they claim that a similar chain hung over the fire built on the floor of the stable at Bethlehem, and that at the birth of Christ, the virgin mother grasped it for support. It became cool at her touch lest it burn the saintly hand.

"Pleasant Day" Now.

The horrors of war are making themselves felt in Minneapolis, Minn. Restaurant keepers in that town have inaugurated a pleasant day, in order to save wheat, sugar and lard. If this experiment proves successful a doughnutless day will be inaugurated.

Important to Mothers. Examine carefully every bottle of CASTORIA, that famous old remedy for infants and children, and see that it bears the Signature of *Dr. J. C. Fletcher* In Use for Over 30 Years. Children Cry for Fletcher's Castoria.

Self-interest is the principal ingredient in the interesting things of life.

A FIGHT FOR LIFE

It has been fight or die for many of us in the past and the lucky people are those who have suffered, but who are now well because they heeded nature's warning signal in time to correct their trouble with that wonderful discovery of Dr. Pierce's called "An-an-uric." You should promptly heed these warnings, some of which are dizzy spells, headache, irregularity of the urine or the painful twinges of rheumatism, sciatica or lumbago. To delay may make possible the dangerous forms of kidney disease, such as stones in the bladder.

To overcome these distressing conditions take plenty of exercise in the open air, avoid a heavy meat diet, drink freely of water and at each meal take Dr. Pierce's Anuric Tablets (double strength). Pierce's Anuric Tablets, double strength. You will, in a short time, find that you are one of the firm indosers of Anuric, as are thousands of neighbors.

Step into the drug store and ask for a 60c bottle of Anuric, or send Dr. V. M. Pierce, Buffalo, N. Y., 10c for trial pkg. Anuric, many times more potent than lithia, eliminates uric acid as hot water melts sugar.

Eat Fruit to Save Flour.

The people of the United States have bananas, apples and a dozen perishable foods that are denied our soldiers and the soldiers of our allies in France. If one person will do without a biscuit a day by eating the equivalent in fruit or perishable vegetables, in one year the wheat in 365 biscuits will have been saved for shipment to Europe. And the fruit and vegetable eater will be happier and healthier for the practice. Surely that is worth the doing. Instructions from the government tell exactly what is to be conserved. When those instructions are not observed the consumer is helping Germany to his best ability.—*Houston Post*.

COVETED BY ALL

but possessed by few—a beautiful head of hair. If yours is streaked with gray, or is harsh and stiff, you can restore it to its former beauty and luster by using "La Creole" Hair Dressing. Price \$1.00.—*Adv.*

Object to Sunday Work.

Abolishing Sundays resulted in rioting in Augsburg, Bavaria, and as a result a compromise is now being tried. Sunday work henceforth including rest hours, will only cover six hours. Youthful workers of both sexes will be permitted to go to church. The Bavarian munition manufacturers also agree to limit work to 54½ hours a week for which 56½ hours pay will be given. It is promised that Sunday work shall cease by March, 1918.

Catarrhal Deafness Cannot Be Cured

by local applications as they cannot reach the diseased portion of the ear. There is only one way to cure Catarrhal Deafness, and that is by a constitutional remedy. HALL'S CATARRH MEDICINE acts through the blood on the mucous surfaces of the system. Catarrhal Deafness is caused by an inflamed condition of the mucous lining of the Eustachian Tube. When this tube is inflamed you have a running ear or imperfect hearing, and when it is entirely closed, deafness is the result. Unless the inflammation can be reduced and this tube restored to its normal condition, hearing may be destroyed forever. Many cases of Deafness are caused by Catarrh, which is an inflamed condition of the mucous surfaces. ONE HUNDRED DOLLARS for any case of Catarrhal Deafness that cannot be cured by HALL'S CATARRH MEDICINE.

All Druggists Tc. Circulars free. F. J. Cheney & Co., Toledo, Ohio.

Not Fond of Army Life.

Army life did not agree with Ginger, a Boston bull. After a three-weeks' career as mascot in the Canadian army, he has returned to his old haunts, and is happy again. The dog is owned by John Hamilton, a Los Angeles resident of fifteen years' standing, who recently enlisted in the Canadian forces. He took Ginger along, but the dog did not take to the army life. In fact, he was wasting away, until Hamilton decided to send him back to Los Angeles. On his arrival he ate six meals in three hours and now has a joyous bark for all his old friends.

Tea Leaves in War.

Instructions have been sent to all English army and navy canteens to save all used tea leaves, which are to be carefully kept in muslin bags and forwarded to central depots. The old leaves are not to be used again in making beverages, but are needed in connection with munition making.

Keeping the Quality Up. LAXATIVE BROMO QUININE, the World-Famous Cure for Colds and Grip, is now 10c per box. No account of the advance in the price of the six different Medicinal Concentrated Extracts and Chemicals contained in LAXATIVE BROMO QUININE. It was necessary to increase the price to the 10c. It has stood the test for a Quarter of a Century. It is used by every civilized Nation.

His Game.

"How did he make his fortune?" "Promoting bazars for worthy charities."

THIS IS THE AGE OF YOUTH. You will look ten years younger if you darken your ugly, grizzled, gray hairs by using "La Creole" Hair Dressing.—*Adv.*

There is no ring to a latitude—it is like counterfeit coin.

When Your Eyes Need Care Try *Murine Eye Remedy* It is the only eye remedy that cures all eye troubles. It is sold by every Druggist.

Neglected Colds bring Pneumonia

CASCARA QUININE

The old family remedy—in tablet form—safe, sure, easy to take. No opiate—no unpleasant after effects. Cures colds in 24 hours—Grip in 3 days. Money back if it fails. Get the genuine fact with Red Top and Mr. Hill's picture on it. 24 Tablets for 25c. At Any Drug Store.

TO BUILD UP AFTER GRIP, COLDS!

Quincy, Ill.—"About five years ago this spring I had a very bad attack of the Grip. I doctored to rid myself of it, but it seemed as though it would hang on forever. I had read of Dr. Pierce's Golden Medical Discovery and decided to give it a trial. It helped me right from the start, and four bottles made a new man out of me. Recently I became ill with another attack of Grip and I took the Discovery with the same good results."—G. C. WILLIAMS, 503 N. 11th St.

Dr. Pierce's Golden Medical Discovery, the herbal remedy, has made a fine reputation for 50 years. It contains no alcohol or narcotics. The ingredients are printed on the package. Send 10 cents to Dr. V. M. Pierce, Invalids' Hotel, Buffalo, N. Y., and he will send you a trial package of the tablets.—*Adv.*

Why Bald So Young

Rub Dandruff and Itching with **Cuticura Ointment**

Shampoo with Cuticura Soap. Sold everywhere. Soap 25c. Ointment 50c.

SHIP YOUR CATTLE, HOGS and SHEEP to CARR SMITH & SONS

Live Stock Commission Agents
National Stock Yards, Ill.
Write, wire or phone for special information

TYPHOID is no more necessary than Smallpox. Army experience has demonstrated the almost miraculous efficacy, and harmlessness, of Antityphoid Vaccination. Be vaccinated NOW by your physician, you and your family. It is more vital than house insurance. Ask your physician, druggist, or send for "Have you had Typhoid?" telling of Typhoid Vaccine, results from use, and danger from Typhoid Carriers. Preserving Vaccine and Serum under U. S. License. The Cutter Laboratory, Berkeley, Cal., Chicago, Ill.

No Typhoid in French Army. Prof. H. Vincent of the French army medical corps informs the Academie de Medicine that as a result of vaccination against typhoid and para-typhoid the number of cases had fallen this year to an average of 0.054 per thousand. The mortality is now only about three in a million. Compared with conditions before the war, when the vaccination was by no means universal, the cases are seven times less numerous and the deaths 8.5 times less numerous now.

RECIPE FOR GRAY HAIR.

To half pint of water add 1 oz. Bay Rum, a small box of Barbo Compound, and ¼ oz. of glycerine. Any druggist can put this up or you can mix it at home at very little cost. Full directions for making and use come in each box of Barbo Compound. It will gradually darken streaked, faded gray hair, and make it soft and glossy. It will not color the scalp, is not sticky or greasy, and does not rub off. *Adv.*

Natural Presumption. "What do you want to know, son?" "Are barks the kind of vessels they have dog watches on?"

All the money you intended to save doesn't draw interest.

Consistency is often but another name for contrariness.

ASTHMA

There is no "cure" but relief is often brought by—

VICK'S VAPORUB

Distemper Can Be Controlled

by using **DR. DAVID ROBERTS' FEVER PASTE** 50c and **WHITE LINIMENT** 25c

Read the Practical Home Veterinarian Send for free booklet on ANTHRAX, DYSENTERY, and other diseases. Write Dr. David Roberts' Vet. Co., 100 Grand Avenue, Waukegan, Wis.

Mother Gray's Powders Benefit Many Children

Thousands of Mothers have found **MOTHER GRAY'S SWEET POWDERS** an excellent remedy for children complaining of Headaches, Colds, Constipation, Feverishness, Stomach Troubles and Bowel irregularities from which children suffer at this season. These powders are easy and pleasant to take and excellent results are accomplished by their use. Used by Mothers for 35 years. Sold by Druggists everywhere, 25 cents. Trial package FREE. Address, **THE MOTHER GRAY CO., Le Roy, N. Y.**

HAIR BALM

A safe preparation of the most famous hair restorer. It cures itching scalp, dandruff, and keeps the hair soft and glossy. Sold by every Druggist.

W. H. U., ST. LOUIS, MO. 2-17